

Laboratory Test report

FORM L-54 V2



713-TEST
NBN EN ISO/IEC 17025 :2017

Schröder
Experts in lightability™

Laboratoire Schröder
Rue de Rome 3 - B-4000 Liège - BELGIUM
Tel.: +32.4.224.71.40

Tightness test

General information

Subject : IZYLUM LT 3 - 108 Seoul 5050 - MOSO 200W - 960mA GLASS - Nema socket - Before endurance

Asked by : NAGY Ádám

Created on : 17/05/2023

Started on : 17/05/2023

Test number : D230567

Reference norm : IEC/EN 60598-1 Ed9 (2021) +A11 (2022)

Sample(s) : E230365

Test conditions

Luminaire : IZYLUM LT 3

Operator : Abry Marc

Number of LED : 108

LED : Seoul 5050

Driver current (mA) : 960

Protector Material : Glass Extra Clear

Protector Shape : Flat

Additional info :

Test realized before endurance D230569

Testing Facility : BER - SCHREDER

Conclusion



Success

Conclusion :

Statement of conformity according to section 9.2 of IEC/EN 60598-1 Ed9 (2021) + A11 (2022):

IPx6 passed.

Note: based on the tests IPX5/IPX6 the product is considered to pass the rain test according to §17.5.2 of UL 1598:2021*

* not covered by BELAC accreditation

Validated by :

LERHO Xavier

Duplicate to : SZÜGYI János Péter, NAGY Ádám

LAB : 25/05/2023

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Test(s) details

Test(s)

Name	Description	Verdict
IPx6	<ul style="list-style-type: none">- Luminaire switched ON until stable T°- Luminaire switched OFF and immediately sprayed with water jet- Hose diam. 12,5 mm- Water flow: 100 l/min- Spraying distance: 3 m- Duration of test: 3 minutes	Success

IPx6

Verdict(s)

Pre-conditioning time :

- 70 minutes

Test result :

- Passed : No water entry in the enclosure of the luminaire

Detail(s)



IP x6



Result-1



Result-2



Result-3



Result-4



Result-5

Test room temperature (°C) :

23.8

Measurement equipment :

Rotating table (A001/2)
Chronometer (A068)
Thermometer (A039)
Flowmeter (A001/9)
Lance (A001/12/1)
IPx6 nozzle (A001/12/5)

Quantities measured :

Verification of water/dust ingress within a luminaire enclosure according to

For IP2X: PT-S-14
For IP3X/4X: PT-S-15
For IP5X/6X: PT-S-06
For IPX3/X4: PT-S-01
For IPX5/X6: PT-S-08
For IPX7/X8: PT-S-09
For IPX9(15°C)/X9(80°C) : PT-S-10

Uncertainties :

Statement of uncertainties (K=2, 95% of confidence level):

Time: 0,35 seconds per 10 minutes
Temperature: 0,6 K
Calipers: 0,005 mm
Measuring tape: $\pm 1,13$ mm
Dynamometric key :
From 0.5 to 2.5 Nm : 0,15 Nm
From 2.5 to 5 Nm : 0,22 Nm
From 5 to 25 Nm : 0,83 Nm
From 25 to 60 Nm : 2,73 Nm
From 60 to 100 Nm : 3,55 Nm

For solid ingress test:

IP2X:

Probe dimensions: $\pm 0,6$ mm
Applied force: $\pm 0,4$ N

IP3X:

Probe dimensions: $\pm 0,3$ mm
Applied force: $\pm 0,13$ N

IP4X:

Probe dimensions: $\pm 0,1$ mm
Applied force: $\pm 0,11$ N

IP5X/6X

Test duration (talcum suspension time): ± 3 seconds
Talcum mass: 0,02 %

For liquid ingress test:

IPX3/X4

Table rotation: ± 6 sec/rotation
Arms Rotation angle: $\pm 3^\circ$
Water flow: $\pm 4,5$ %

IPX5/X6

Table rotation: ± 6 sec/rotation
Water flow: ± 4 %
Test Distance: +0 / -50 cm

IPX7/X8

Test depth: +10 cm / -0 cm

IPX9

Water temperature: 1.25 K

D230567

Test distance: 1.59 mm (for 175mm)

Test duration: 2.49 s (for 3min)

Water pressure: 0.37 N

Decision rules :

Pass/fail criteria for individual test statement of conformity (Verdict):

For solid ingress test:

IP2X:

If contact possible with live parts: fail

Otherwise: success

IP3X/4X:

For luminaires without draining holes, nor ventilation slots for forced cooling, penetration of the test probe in the enclosure: fail

For luminaires with draining holes, or ventilation slots for forced cooling, if contact possible with live part: fail

Otherwise: success

IP5X/6X

By visual inspection:

If possible hazard due to presence of conductive dust: fail

For IP5X: If no possible hazard due to the presence of conductive dust: success

For IP6X: No presence of talcum: success

For liquid ingress test:

IPX3/X4/X5/X6/IPX9(15°C)/X9(80°C):

By visual inspection:

If possible hazard due to presence of water: fail

If no possible hazard due to the presence of water and no efficient way to evacuate the water: fail

If no possible hazard due to the presence of water and an efficient way to evacuate the water: success

No presence of water: success

IPX7/X8:

By visual inspection:

Presence of water: fail

No presence of water: success

Pass/fail criteria for the test report statement of conformity (Conclusion):

At least one of the individual test statements of conformity (Verdict) is failed: failed

Otherwise: success

End of accredited report :
